G. W. STOUT.

PACKAGE TIE.

APPLICATION FILED JUNE 11, 1917.

1,241,298. Patented Sept. 25, 1917.

Fig. 1.

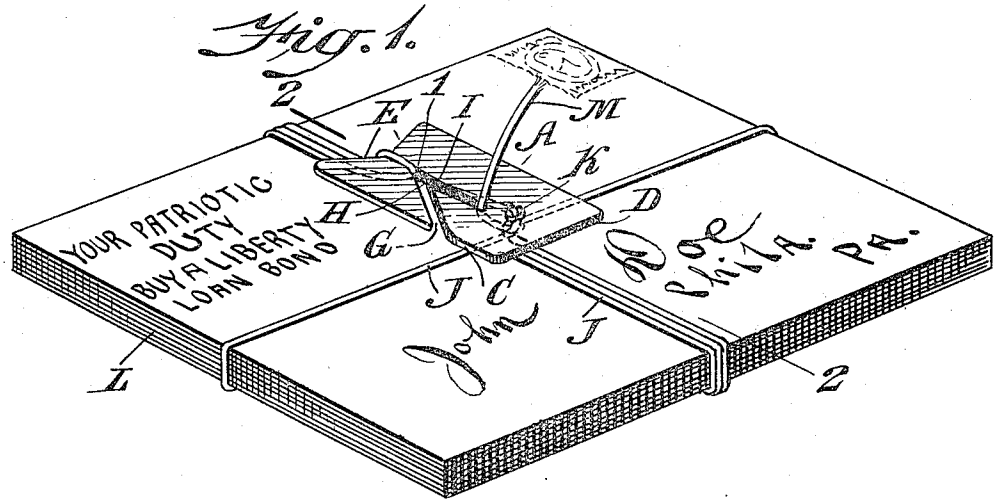


Fig. 2.

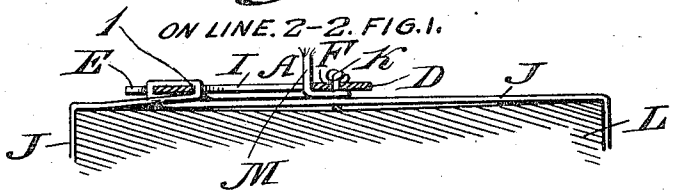


Fig. 4.

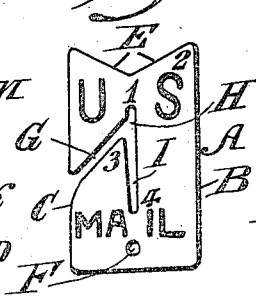


Fig. 5.

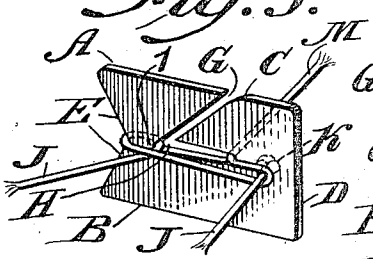


Fig. 3.

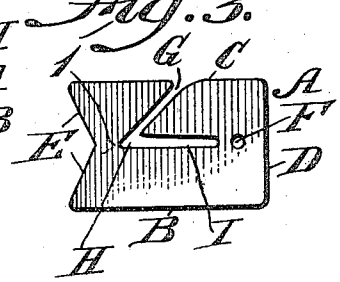
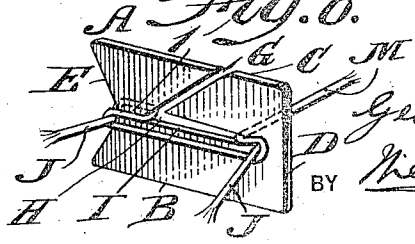


Fig. 6.



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GEORGE W. STOUT, OF MERCHANTVILLE, NEW JERSEY, ASSIGNOR TO AMERICAN VULCANIZED FIBRE COMPANY, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE.

PACKAGE-TIE.

1,241,298. Specification of Letters Patent. **Patented Sept. 25, 1917.**

Application filed June 11, 1917. Serial No. 174,125.

To all whom it may concern:

Be it known that I, GEORGE W. STOUT, a citizen of the United States, residing at Merchantville, county of Camden, State of New Jersey, have invented a new and useful Package-Tie, of which the following is a specification.

My invention consists of a novel construction of a package tie, comprising a thin plate or body made out of fiber, metal, wood or any other suitable material possessing sufficient strength and rigidity, one end of said plate being provided with an eye therein for the reception of one end of the tying cord while the opposite end thereof with which said cord engages is preferably V-shaped, one side of said plate being provided with an angularly or obliquely extending kerf or slot which merges into or meets a second slot extending longitudinally of said plate or body, whereby an exceedingly efficient package tie is produced which can be manufactured at a small expense and is especially adapted for the tying of letters, newspapers and packages of every nature, the articles to be tied being held firmly in assembled position by the proper manipulation of the free end of the tying cord with respect to the coacting slots in said body.

For the purpose of illustrating my invention, I have shown in the accompanying drawing one form thereof which is at present preferred by me since the same will be found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective view of a package tie embodying my invention showing the same applied to a bundle of letters or the like.

Fig. 2 represents a section on the line 2—2 Fig. 1.

Fig. 3 represents a plan view of the package tie in detached position.

Fig. 4 represents a plan view of the reverse side of a tie differing slightly from that seen in Fig. 3 having thereon indicia hereafter referred to.

Figs. 5 and 6 represent perspective views of the rear of the package tie showing different ways of effecting the tying operation.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings.

A designates my novel construction of package tie, the same comprising a thin body or plate constructed preferably of vulcanized fiber or similar material possessing the requisite strength, rigidity, lightness and durability.

In the present embodiment of my invention I have shown the body A as provided with the side walls B and C and the end wall D, while the end opposite to said wall D is composed of the inclined or V-shaped walls E. The body A has an eye or opening F therein and the wall or edge C has an angularly or obliquely extending kerf, cut or slot G therein which terminates or merges at H into the slot I, whose terminal is located a short distance from the eye F. J designates the tying cord which is inserted in the eye F and has a knot K in the end thereof.

The manner of using my invention will be apparent from Figs. 1, 2, 3 and 6 and to facilitate the detailed description, I have on Fig. 4 placed the indicia 1, 2, 3 and 4 as indicating the sequence of the steps of manipulating the cord in the tying operations.

In tying a package of letters L, as seen in Fig. 1, the package is preferably held in the left hand, with the stamped end toward the operator.

The tie A is placed on the top of the package near the center, as seen in Fig. 1, and the cord is carried lengthwise around the package and crossed at right angles under the tie, which latter may now be released. The free end of the cord is then inserted into the slot G and drawn to the point 1 (see Figs. 1 and 4) formed at the angle or junction of the slots G and I. The cord is next drawn sufficiently taut and passed under the plate A at the point 2 and on around under the plate into the slot G around the apex 3 of the triangle, as indicated in Fig. 4, and thence pulled toward the point 4, as indicated in Fig. 4, the free end M of the cord being held from withdrawal, untying or loosening by its frictional contact with the walls of the slot I, as will be understood from Figs. 1, 5 and 6.

The passing of the loop of cord under the plate A at the point 2 is manifestly rendered easy by the adjacent V-shaped recessed end E of the plate; and it will also be manifest that the said V-shaped end E, by virtue of the apex of its angle resting close to the slot end 1, is adapted to prevent slipping of the cord relative to the plate.

It will be apparent that at the point 1 in Fig. 4, formed between the angle at the junction of the sides E and the intersection of the grooves G and I, a throat having inclined walls is formed, which effectively retains the cord wound thereon, as seen at the left of Figs. 1, 5 and 6.

In effecting the tying operation, the free end of the tying cord can be initially manipulated either as seen in Figs. 5 or 6, the tying cord in Fig. 6 being shown as initially passed downward through slot G, whereas in Fig. 5, it is shown as being initially passed upwardly through the slot G. In order to release the cord, it is only necessary to hold the package seen in Fig. 1 in the left-hand with the thumb on the tie, and the top of the latter toward the operator. Upon the free end M of the cord J being dropped into the groove I and below the groove G, and a pull in the proper direction being exerted on the cord, the package will be untied and the tie will fly therefrom.

My invention made on a small scale is exceedingly useful for tying small packages, such as letters, or larger packages, such as newspapers and the like, and when made on a still larger scale is equally useful in the tying of a bale of hay or cotton.

Any accidental pull upon the free end M of the tying cord J will not disengage the same from the plate, as it is necessary for said free end to be located with respect to the grooves I and G in a particular manner in order to effect the untying.

In the construction seen in Fig. 4, I have shown the longitudinally extending groove I as extending a short distance beyond the angularly inclined or oblique groove G, as indicated at the point 1, whereby a slightly additional space is formed at the apex of the triangle 3 to receive the tying cord. While I have shown the tie body A as being substantially rectilinear in shape, its contour may be varied, if desired.

It will be understood that while I have described the preferred manner of effecting the tying operation, I do not intend to be restricted thereto, as I reserve for myself the right to all uses to which my invention may be put.

It will be understood that the slot G may be made slightly wider proportionately to the slot I, if desired, and that the walls of the slot I may be converged slightly toward the hole or eye F, if desired, so as to effectively retain the free end M of the tying cord in position.

It will now be apparent that I have devised a novel and useful construction of a package tie, which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment of it which will be found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. As a new article of manufacture, a plate for the purpose described having an angular recess in one of its ends provided with outwardly diverging walls and a cord-receiving aperture adjacent to its opposite end, and also having an oblique slot reaching from one of its side edges inwardly toward the apex of said angular recess, and further having a longitudinal slot communicating with the inner end of the oblique slot and arranged with one of its ends adjacent to the apex of the angular recess and its opposite end adjacent to said aperture.

2. As a new article of manufacture, a tie plate having an angular recess provided with outwardly diverging walls at one end and having an oblique slot reaching inwardly from one of its side edges and terminating in proximity to the deepest portion of said recess and also having a longitudinal slot communicating at one end with the inner end of the oblique slot and arranged with one of its ends adjacent to the deepest portion of the recess.

GEORGE W. STOUT.

Witnesses:
E. HAYWARD FAIRBANKS,
M. E. BYRNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."